

**DATA CONVERSION REQUIREMENTS DOCUMENT**  
**TABLE OF CONTENTS**

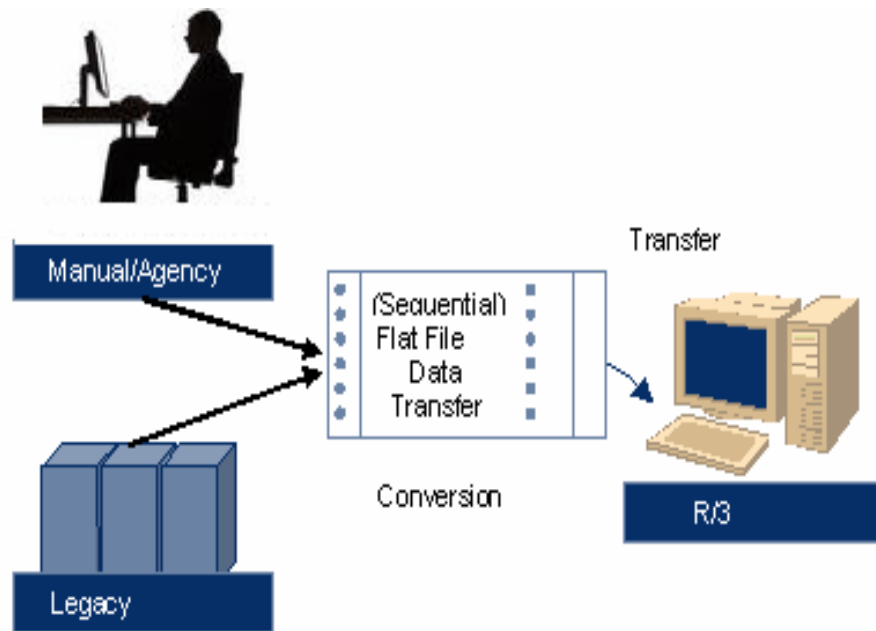
<b>1. Introduction.....</b>	<b>1</b>
<b>2. Identified Business Processes (Scope) .....</b>	<b>1</b>
<b>3. Identified Sources Of Data.....</b>	<b>3</b>
<b>4. Ownership Of Systems And Data Validation Efforts.....</b>	<b>4</b>
<b>5. Transfer Methods (Utilities).....</b>	<b>4</b>
<b>6. Data Transfer Coordination .....</b>	<b>4</b>
<b>7. Required Activities Before Data Transfer.....</b>	<b>5</b>
<b>8. Migration of Conversion Programs and OM Data .....</b>	<b>5</b>
<b>9. Error Handling.....</b>	<b>5</b>
<b>10. Coordination of Legacy, Functional, and Development Efforts.....</b>	<b>6</b>

## 1. INTRODUCTION

The data conversion activities are woven into the Accelerated SAP (ASAP) methodology. The accurate and timely conversion of data is critical to the success of the BEACON project. New implementations require moving legacy data from various sources into the SAP system. Files containing information for HR/Payroll data and FI Integration data are identified for extraction purposes and the data is loaded into the new system. Initial data transfer is the process of populating the SAP database with existing data from internal and external legacy systems and also identifying gaps that require manual collection efforts from agency personnel.

**Data transfer involves two primary steps:**

1. Conversion. Data is converted from the legacy system(s) and Manual/Agency sources into the required sequential file format
2. SAP data transfer. Data is made available to the SAP system where SAP data transfer programs and tools read the extracted data from sequential files and load into SAP.



## 2. IDENTIFIED BUSINESS PROCESSES (SCOPE)

An SAP Business Process defines a general category of data such as Personal, Benefit, Time, Payroll, Organizational Management and FI data. An SAP infotype defines a specific type of data within a business process. Multiple infotypes are used to define the data requirements for a business process. The business processes and associated infotypes have been identified for the BEACON SAP implementation.

Listed below are the infotype counts for data conversion.

Type ▼	BN	FI	OM	PA	PD	PT	PY	Security	Grand Total
Conv	7	5	25	20	1	15	18	5	96

The complete list of conversion objects can be found in the *Final FRICE\_list.xls* file.

Included in these counts are the conversion data load for 7 custom infotypes. This list follows.

BN – Benefits
FI – Financial
OM – Org Management
PA – Personal Administration
PD – Personnel Development
PT – Time
PY – Payroll

RICE ID	Name	Description	Type	Func. Sub Group
C087	IT 9018	9018	Conv	FI
C089	IT9002	9002	Conv	PA
C094	Conversion Support for Enhancement of Custom Infotype 9100	A007(Rice ID) OM Custom Infotype 9100 (Number may change - may want to specify as 9XXX) - Conversion Required	Conv	OM
C095	Conversion Support for Enhancement of Custom Infotype 9028	A009 - OM Custom Infotype 9028 (9XXX) - County - Conversion Required	Conv	OM
C096	Conversion Support for Enhancement of Custom Infotype 9300	A010 - OM Custom Infotype 9300 (9XXX) - Old Position Numbers	Conv	OM
C097	Conversion Support for Enhancement - Driver License	A015 - OM Obj flag for Driver license - Relationship load is required for conversions	Conv	OM
C098	Conversion Support for Enhancement - Shift Premium Indicator	A016 - OM Custom Infotype 9XXX - Shift premium indicator - Need Conversion	Conv	OM

### 3. IDENTIFIED SOURCES OF DATA

- PMIS HR data
- Central Payroll data
- Department of Transportation (DOT) Payroll data
- External sources of data (benefit information)
- Data files from agencies

**PMIS** – Legacy HR system

**Manual** – User verification and cleanup of legacy data

**Agency** – Collected electronically from agencies

Manual efforts organize data from agencies into a central repository where data cleansing and conversion rules are applied. The following lists the 41 infotypes that will require manual data collection and cleansing before providing file to SAP conversion programs.

RICE ID	Name	Description	Source System
C010	Garnishment Document	0194	Manual/Agency
C011	Garnishment Order	0195	Manual/Agency
C031	Date Monitoring	0019	Manual/Agency
C032	Education	0022	PMIS/Agency
C033	Other/Previous Employers	0023	PMIS/Manual
C034	Qualifications	0024	PMIS/Agency/Manual
C036	Objects on Loan	0040	Manual/Agency
C037	Process Org Unit Object	1000	PMIS/Manual/Agency
C038	Process Org. Unit Relationship	1001	PMIS/Manual/Agency
C039	Process Position Object	1000	PMIS/Manual/Agency
C040	Process Job Object	1000	PMIS/Manual/Agency
C041	Process Position Relationship	1001	PMIS/Manual/Agency
C042	Process Job Relationship	1001	PMIS/Manual/Agency
C043	Process Planned Compensation - Job	1005	PMIS/Manual/Agency
C044	Process Vacancy / Position	1007	PMIS/Manual/Agency
C045	Process Account Assignment - Org. Unit	1008	PMIS/Manual/Agency
C046	Process Emp Group/Sub Group - Position	1013	PMIS/Manual/Agency
C048	Certification and Licenses	IT795	PMIS/Agency/Manual
C057	Work Schedule	0007	Manual/Agency
C058	Absences	2001	Manual/Agency
C059	Attendances	2002	Manual/Agency
C060	Quota Corrections	2013	Manual/Agency
C061	Quota Payout	0416	Manual/Agency
C062	Absence Quotas	2006	Manual/Agency
C063	Shift Substitutions	2003	Manual/Agency
C064	Workers' Comp. NA	0076	Manual/Agency
C065	Military Service	0081	Manual/Agency
C066	Absence Donation/Withdraw (US)	0613	Manual/Agency
C067	FMLA Event	0672	Manual/Agency
C068	Time Transfer Specifications	2012	Manual/Agency
C069	Attendance Quotas	2007	Manual/Agency
C070	On-Call	2004	Manual/Agency
C071	Load Charge Objects in the system	Load custom Charge Objects	Manual/Agency
C072	Communication Type	0105 / SUBTYPE - 10	Manual/Agency

<b>RICE ID</b>	<b>Name</b>	<b>Description</b>	<b>Source System</b>
C073	Process Standard Authorization (role based security) - transaction IT based	1016	Manual
C074	Process Structural Authorization (pd profiles - org structure )	1017	Manual
C081	Create Position Description	1002	PMIS;Manual;Agency
C082	Create Department / Org Staff	1003	PMIS;Manual;Agency
C083	Create Authority / Resources	1010	PMIS;Manual;Agency
C090	Residence Status	0048	Manual/Agency
C091	Grievances NA	0102	Manual/Agency

#### 4. OWNERSHIP OF SYSTEMS AND DATA VALIDATION EFFORTS

The BEACON project must identify and secure agency resources to conduct data validation after successful load into SAP. There will be multiple loads into SAP and each load will require validation effort from agency resources. The BEACON team must ensure that the following items are provided to agency resources:

- Infrastructure for SAP access (Ex. VPN, SAPGui)
- Training for resources on SAP HR/Payroll for validation purposes

#### 5. TRANSFER METHODS (UTILITIES)

The development team will work with the functional team for each business object to select one of the following data transfer methods:

- SAP standard data transfer tools such as Legacy System Migration Workbench (LSMW) which will be used for loading the majority of infotypes.
- Manual entry of data with online transactions, for example IT0040 – Objects on Loan.
- Custom ABAP programs for month-to-date, quarter-to-date, and year-to-date for populating Payroll Clusters involving 3 tables and special schema XLK0 and ULK9.

The selection of data transfer method will be based on the analysis of the data, including data volumes and available SAP tools. The analysis will determine what data is in the legacy system and which SAP applications correspond to the business objects to be transferred.

The ASAP implementation methodology encourages the State to empower its functional team to develop objects using LSMW.

#### 6. DATA TRANSFER COORDINATION

The organizational structure and actual customization affects the data that transfers for business objects. It is important to finalize or freeze customizations before the last test run; customization changes after the final transfer may result in additional fields that require the preparation and transfer of additional data.

The conversion team will coordinate with the functional team to determine effective dates for conversion data.

## **7. REQUIRED ACTIVITIES BEFORE DATA TRANSFER**

Before the conversion data is loaded into SAP, the following must be completed:

- Ensure SAP customizations are complete and transported.
- Clean and extract data as per the required layout for loading into SAP.
- Identify transaction(s) in SAP system which will be used to import the data.
- Prioritize the sequence of infotypes to be loaded.
- Manually run transactions in the SAP system with test data from the legacy system to identify inconsistencies. There may be required fields that do not correspond to data fields in the legacy system. In such a case, it may require assigning a fixed value or establishing an optional field for data transfer.
- Map the fields in advance: Assign the source fields to the target fields.
- Determine the form in which non-SAP data will be transferred into the SAP system (e.g., via “direct move” or according to a conversion rule).
- Define the translation rules.
- Complete data extraction from non-SAP system. (COBOL and other legacy program programming languages)
- Ensure extracted legacy data is clean.
- Identify form of legacy data. (Sequential file, Excel, text file, etc).

## **8. MIGRATION OF CONVERSION PROGRAMS AND OM DATA**

The SAP landscape provides and development, quality assurance, and production environments. After successful testing of the conversion programs in the development environment the programs will be transported to the next level in the landscape where full data loads, validation of data and configuration is performed for that environment. Multiple loads will be performed in each environment based on findings during validation of data and configuration before transporting to next level in the landscape.

In specific situations, data is migrated across the landscape using standard SAP tool and programs. Org Management data may follow this process using standard SAP program RHMOVE30. The following are potential issues related to this process.

- Development environment may require additional space and memory to accommodate load of full production data.
- Performance of development environment
- Issues related to security in a less secure development environment.

## **9. ERROR HANDLING**

Error information is obtained from SAP logs and analysis of errors is carried out in consultation with Legacy HR Payroll Team and Business and Functional Teams, taking suitable actions to correct errors and re-load into SAP.

The following strategy is recommended after analyzing the Errors/Fixing and re-loading into SAP:

- If the error is coming in from Legacy “System of Record”, it requires cleansing in the Legacy Extraction process and re-loading in SAP.

- If the error is due to change in Conversion rules/Configuration change/Program Error, correct the logic in SAP/Configuration and reload these records.
- If the error records are obsolete records, consult with Business owners and make decisions on error handling technique.

#### **10. COORDINATION OF LEGACY, FUNCTIONAL, AND DEVELOPMENT EFFORTS**

- Legacy data extraction must be synchronized from all sources to include PMIS, DOT, Central Payroll, External sources, and agency.
- Coordination of data submitted manually from agencies.
- Data mapping with input from functional, legacy, and technical teams. A sample mapping worksheet is located on the next page.
- Completion and transportation of configuration prior to data loads.
- Prioritization and sequencing of load process.
- Coordination of validation efforts with agencies and BEACON project team.

## Beacon - Data Mapping Spreadsheet

Master Data: IT0076				Module: TM				TRAN CODE: PA30				Source System: PMIS				Page 1 of 1	
SAP Object Name: LSMW_IT0076				Conversion Volume:				Prepared by: Legacy: SAP: MMason				Reviewed by: Legacy: SAP:				Functional Contact:	
LEGACY SYSTEM ANALYSIS								CONVERSION		SAP ANALYSIS							
Table Name	Field Name	Field Format	Field Length	Source Field Description	Field Stat.	Map Type	Con Rule / Logic in SAP	Infotype Number	SCREEN FIELD NAME	Table Name	Field Name	Field Length	Default Value	Field Status	SAP Field Description		
								IT0076	PSPAR-PERNR	P0076	PERNR	8		1	Personnel Number		
								IT0076	RP50G-SUBTY	P0076	RP50G-SUBTY	4		0	1001 Pennsylvania 1002 Connecticut		
								IT0076	P0076-BEGDA	P0076	BEGDA	8		1	Start Date		
								IT0076	P0076-ENDDA	P0076	ENDDA	8		1	End Date		
								IT0076	P0076-STATS	P0076	WCSTA CHAR	1		2	Processing status		
								IT0076	P0076-CASNO	P0076	CASNO CHAR	10		2	Case number		
								IT0076	P0076-SDATE	P0076	SDATE DATS	8		2	Date		
								IT0076	P0076-STIME	P0076	WCSTM TIMS	6		2	Time		
								IT0076	P0076-WHOUR	P0076	WHOUR DECIMAL	5,2		2	Number of hours worked		
								IT0076	P0076-WGTYP	P0076	WGTYP CHAR	4		2	Wage type for workers compensation		
								IT0076	P0076-AMPTY	P0076	AMPTY CURR	9,2		2	Amount paid		
								IT0076	P0076-RULEP	P0076	RULEP CHAR	1		2	Payment rule		
Field Stat. (blank) - same as 0 0 - not used 1 - required 2 - optional 3 - TBD				Map Type (blank) - same as 0 0 - not used 1 - one-to-one 2 - based on rules 3 - TBD				Default Value: Some fields may have to be populated but not supplied by the flat file Comment: Document any peculiarities for this field									